Chapter 1

Economics:
The World Around You

Economics, 7th Edition

Boyes/Melvin

What is Economics?

–Perhaps…**unintended consequences**.

Unintended consequences

- Why, with better safety features in cars like anti-lock brakes air bags, are car accidents increasing?

Unintended consequences

- Why, with better safety features in cars like anti-lock brakes air bags, are car accidents increasing?

- People drive more recklessly, knowing that the safety features in their car will probably prevent a fatality.

2.How Could Cash for Clunkers Be Bad for the Environment?

- The Cash for Clunkers Program is supposed to get old cars off the road and replace them with new, more efficient cars.
- Actually, Cash for Clunkers will result in more clunkers staying on the road longer.
- How can that be?

2.How Could Cash for Clunkers Be Bad for the Environment?

- Clunkers turned in for the program ended up in junkyards. There was an increase in the supply of parts available for older cars, and people repaired cars that might have been scrapped otherwise.

4. Economic Mysteries: Red Light Camera

- In Duluth Georgia, red light cameras are credited with improving safety as drivers became more cautious at intersections.
- But in 2009 the city police department wants to eliminate these safety devices.
- Why would the police - - people hired to protect the public safety - - want the roads to be more dangerous?

4. Economic Mysteries: Red Light Camera

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- But in 2009 the city police department wants to eliminate these safety devices?
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- $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

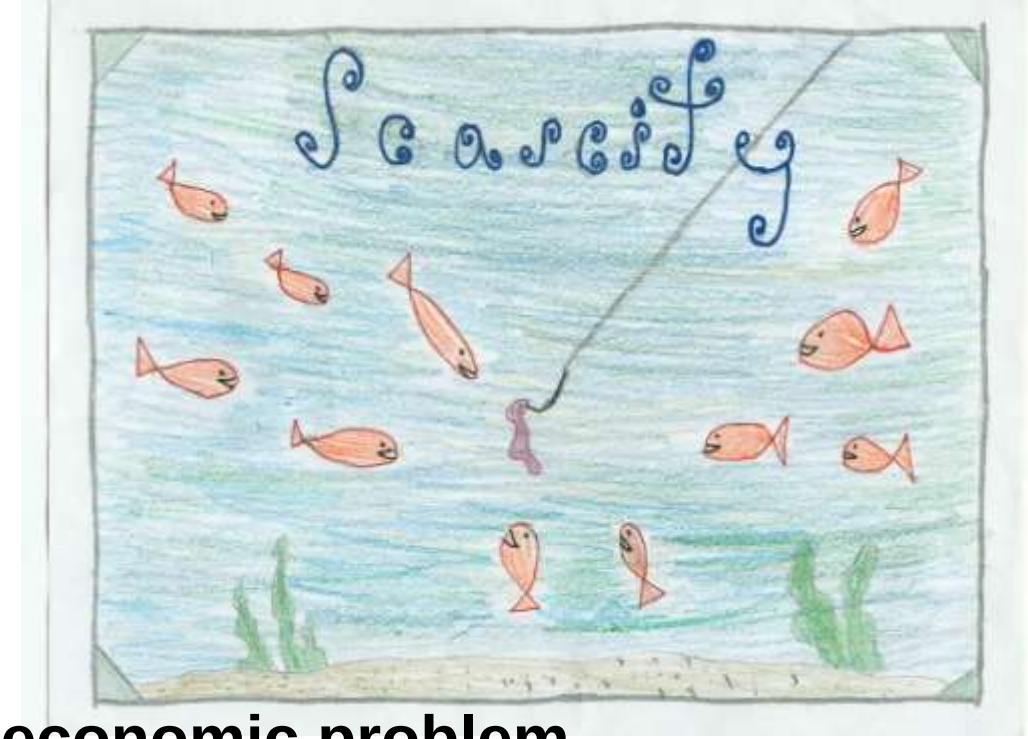
Notes for Chapter 1

Definition of Economics

- **Economics** is the study of how scarce resources are allocated among unlimited wants.

- Scarcity: situation in which there is not enough of something for everyone who wants it for free (at a zero price)

- What is scarce?

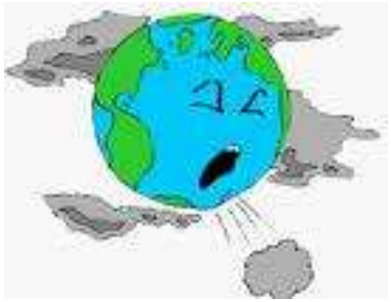


Scarcity is the basic economic problem.

Scarcity, Goods and Bads

- An item that costs something is called **scarce**.
  - **economic goods**—these include **goods** and **services** that have a positive price.
  - A **free good** is a good for which there is no scarcity.

- An **economic bad** is anything you would pay to **get rid of** (pollution, disease, garbage)



Human Nature and Reality

- People have **unlimited wants**.
- People have **limited** resources to acquire the things they want.
- As a result, they must make **choices**.

Rational Self-Interest

- Economists believe that people choose options that give them the greatest satisfaction.

- This means that people:
  - use all available time and information,
  - weigh the costs and benefits of all available alternatives,
  - and choose the alternative that they believe will bring them the most benefit at the lowest cost.
  - This is the alternative that they believe will bring them the most utility, or satisfaction.

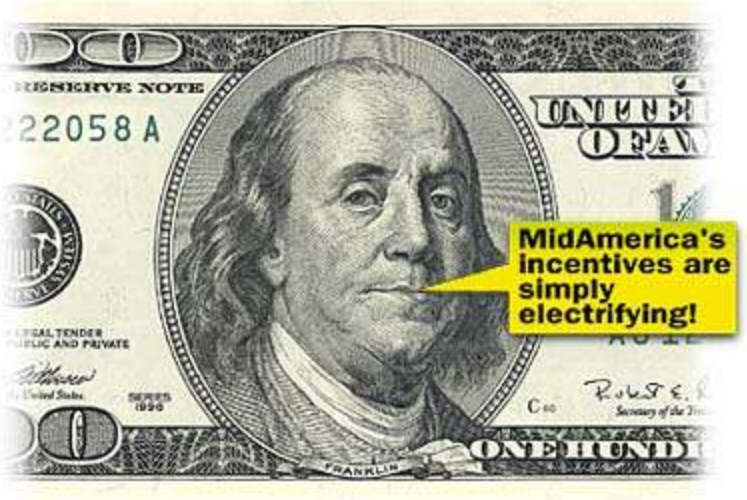
- This does **not** mean that people are innately selfish. Self-interest is **not** greed!

Decisions are often made at the margin.

- Marginal cost
- Marginal benefit
- How many hours do you study for an exam? What is the MC/MB of each hour?

Implications

- Costs and benefits are sometimes referred to as negative and positive **incentives**. Hence **incentives matter**.



- **Incentive:** something that induces a person to act, *i.e.* the prospect of a reward or punishment.

  Examples:

  - When gas prices rise, consumers buy more hybrid cars and fewer gas guzzling SUVs.
  - When cigarette taxes increase, teen smoking falls.

ACTIVE LEARNING *1*

Applying the principles

You are selling your 1996 Mustang. You have already spent $1000 on repairs.

At the last minute, the transmission dies. You can pay $600 to have it repaired, or sell the car "as is."

In each of the following scenarios, should you have the transmission repaired? Explain.

A. Blue book value is $6500 if transmission works, $5700 if it doesn't

B. Blue book value is $6000 if transmission works, $5500 if it doesn't

ACTIVE LEARNING 1
Answers

Cost of fixing transmission = $600

A. Blue book value is $6500 if transmission works, $5700 if it doesn't

Benefit of fixing the transmission = $800 ($6500 – 5700).

It's worthwhile to have the transmission fixed.

B. Blue book value is $6000 if transmission works, $5500 if it doesn't

Benefit of fixing the transmission is only $500.

Paying $600 to fix transmission is not worthwhile.

ACTIVE LEARNING *1*
Answers

Observations:

- The $1000 you previously spent on repairs is irrelevant. What matters is the cost and benefit of the *marginal* repair (the transmission).
- The change in incentives from scenario A to scenario B caused your decision to change.

Positive vs. Normative Economics

- Positive Economics
  - Focuses on **“what is”.**
  - Analyzes actual, measurable outcomes.
  - Does **not** impose value judgments, person feelings or convictions.
  - Positive economics is economics as a science.

- Normative Economics
  - Focuses on what someone thinks **“ought to be”** or **“should be”**.
  - Makes ethical judgments—value judgments.

George W. Bush, the "finger pointer guy."

Common Analytical Mistakes (Logical Fallacies)

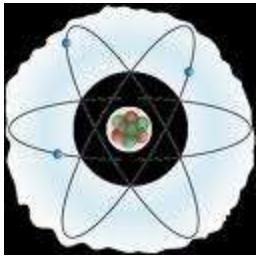
- **Association is not Causation**
  - The mistaken assumption that because two events occur together, one must cause the other. Also given as “correlation is not causation”.

- With a decrease in the number of pirates, there has been an increase in global warming over the same period. Therefore, global warming is caused by a lack of pirates.

Common Analytical Mistakes (Logical Fallacies)

- **Fallacy of Composition**
  - The mistaken assumption that what is true of a part is also true of the whole.

- Atoms are not visible to the naked eye
- Humans are made up of atoms
- Therefore, humans are not visible to the naked eye.



Fallacy of Composition

- The paradox of thrift:

- If one person saved 50% of his earnings, he would be better off one year from now.

- If all people saved 50% of their earnings, we would all be better off one year from now. WRONG!! (why?)

Common Analytical Mistakes (Logical Fallacies)

- **Violation of *Ceteris Paribus***
  - *Ceteris Paribus: Latin for "all else equal".*
  - This occurs when one attempts to analyze the effect of one thing while holding everything else constant, when in fact other things **have** changed.

Micro vs. Macro

- **Microeconomics**
  - Studies the economy at the level of individual consumers, workers, firms, goods, and markets

- **Macroeconomics**
  - Studies the economy at the level of the economy as a whole.
  - Examines total consumer behavior, total employment, total production, total sales, etc.

Econ

2 **Product**

Good is a physical object (**tangible**) that can be purchased.
[These can be **seen and felt** – car, book]

Service is **useful labor** done for a fee (**intangible**).
[These are activities, not items – lawyer or doctor services]

Are the following a good or a service?

Watch? Watch Repair? Hamburger? Education? Basketball?
Clothing? Bicycle? Hair cut? Garbage pickup? Jumpdrive?

Producer

Consumer

3 **Producers (suppliers)** – people who **make goods/svcs**.

4 **Consumers** – people who **buy and use goods/services**.

- 3 Economic Questions and Factors of Production

The Three Basic Questions

1. What To Produce?

1. How To Produce?

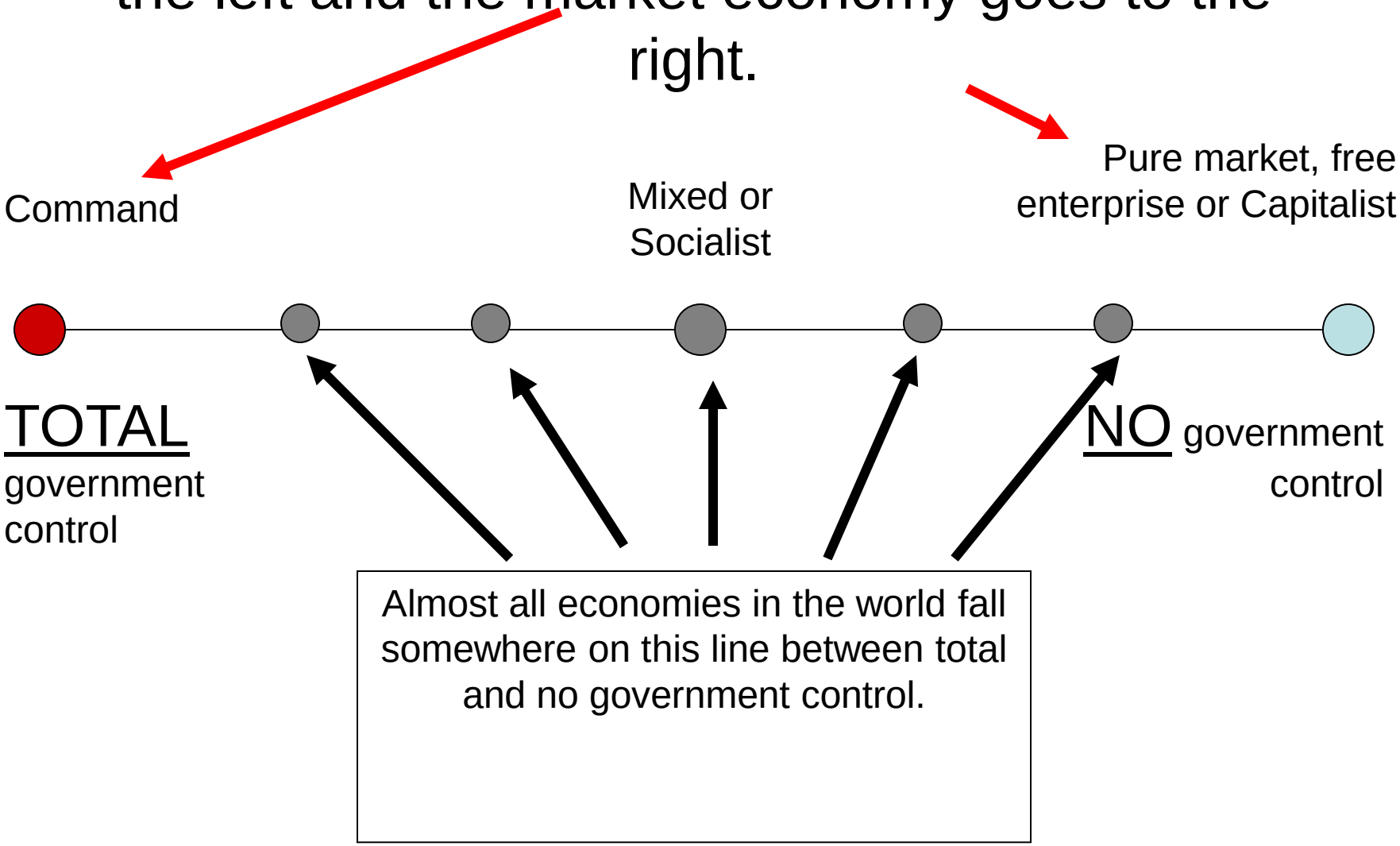
2. For Whom To Produce?

- Command Economies: North Korea, China, Vietnam
  - –Government makes most if not all of the economic decisions
  - –Known as communism and socialism

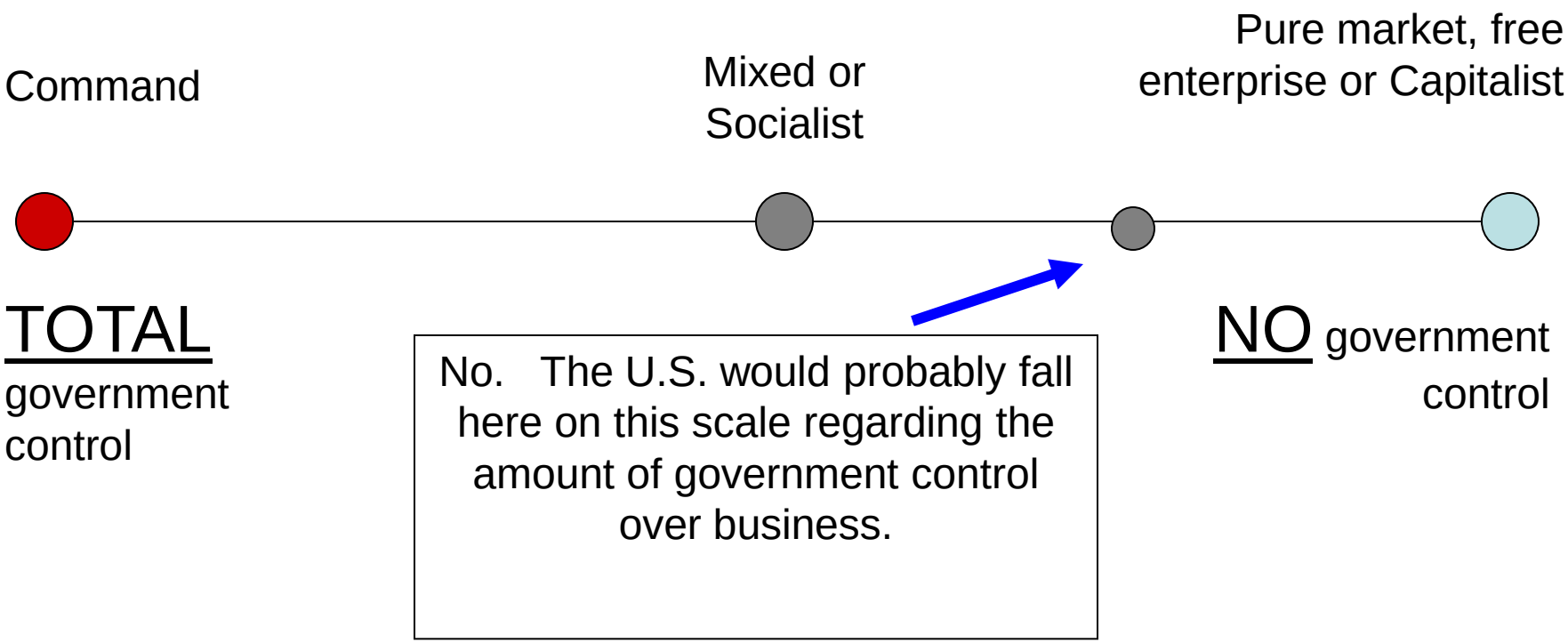
- Traditional Economies:
  - Tribal
  - Decisions made by producing what has always been made, innovation is not favored

- Free Market (capitalist) economies
  - US comes close to this
  - Producers and consumers make economic decisions
  - AKA Free Enterprise

On a scale, the command economy goes to the left and the market economy goes to the right.



Is the United States a Pure Market Economy??



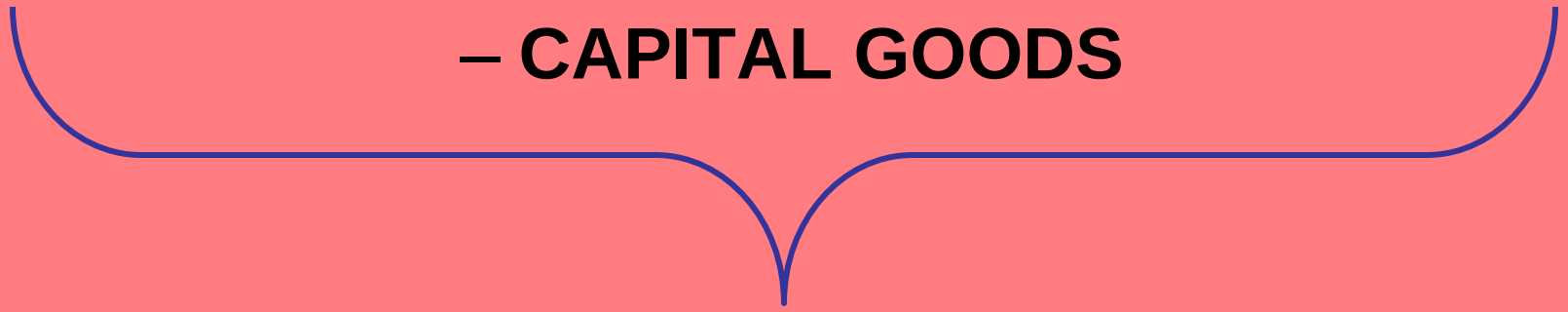
Resources

- Those things that we use to produce, also called the ***Factors of Production or inputs***. They fall into three basic categories:

  – **LAND**

  – **LABOR**

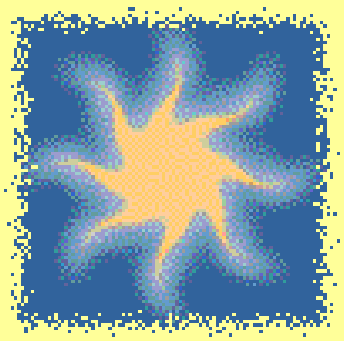
  – **CAPITAL GOODS**



All Organized by an ENTREPRENEUR

Factors of Production

- **LAND: gifts of nature, not man-made**
- **Make a list of 5 examples of natural resources used in production;**



Factors of Production

<u>LABOR</u>: human efforts, abilities and/or skills; includes both blue and white collar

Make a list of 5 labor positions used in production

Factors of Production

<u>CAPITAL</u>: manmade tools and equipment used to produce other goods or services

(physical) Capital is not money!

Make a list of 5 capital goods used in production

Turning Resources into goods and services

Resources	+	Entrepreneurs	=	G and S

Payments for Resources

- Utility Game to introduce Circular Flow!!!

Economic Models

- Economists use models, graphs, charts and pictures to help illustrate economic concepts and relationships.

Circular Flow

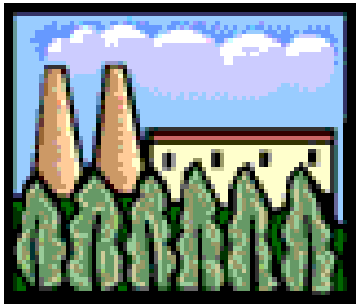
- an economic model that shows the interdependent relationship between households and firms

Market:

- Place or service that allows the exchange of goods, services, or factors of production.

- **Household –** the consuming units in an economy; a.k.a. consumers, individuals

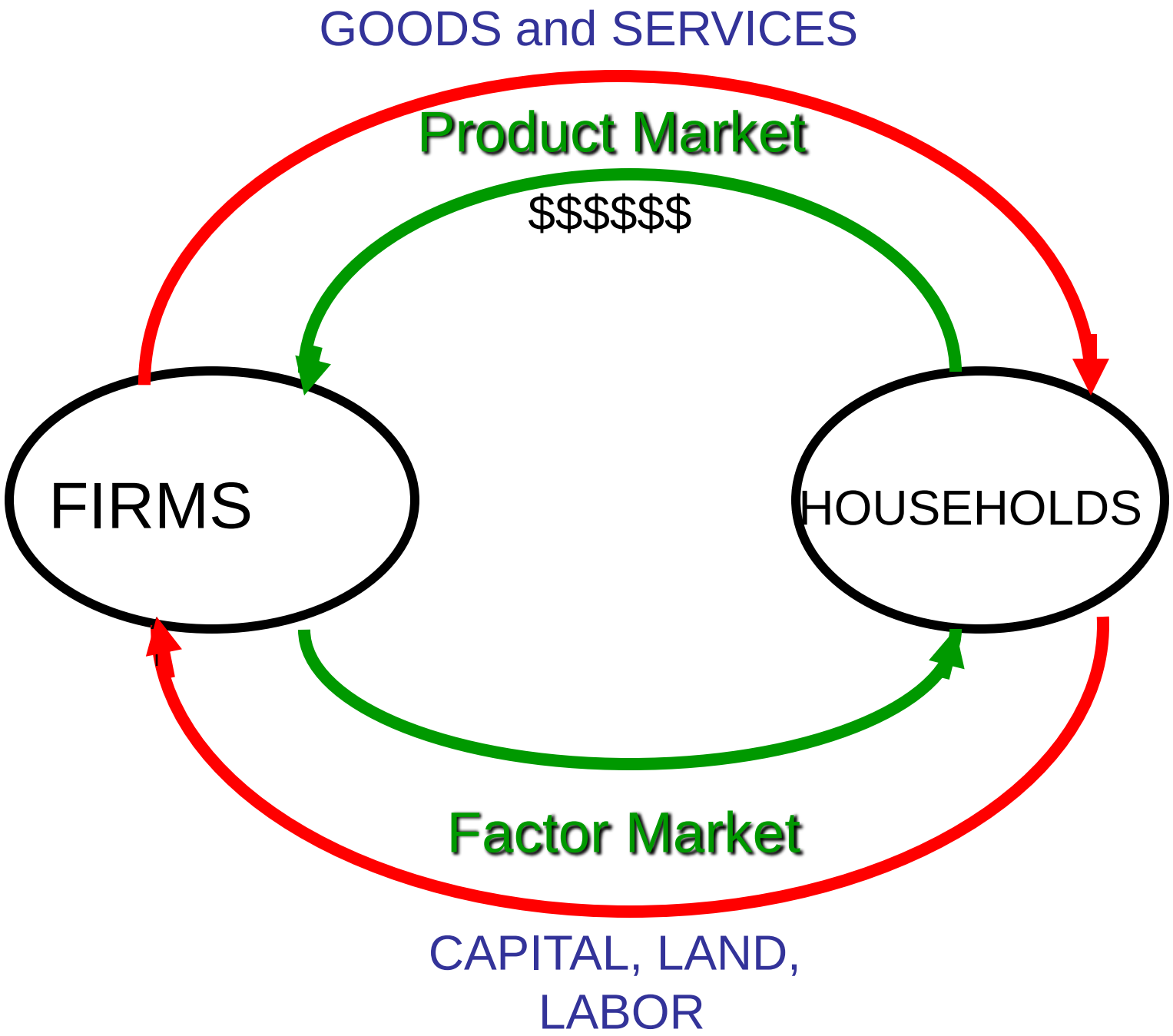
- ***<u>The Goal of a Household</u>*:** satisfy needs and wants by earning money to buy goods and services



- **Firm –** the organization that transforms resources (factors of production) into products (goods and services); a.k.a. producers, businesses
- ***The Goal of a Firm:*** make a profit from the sale of goods and services

- **Product Market–** the market in which goods and services are exchanged

- **Factor Market–** the market in which resources used in production are exchanged; a.k.a. Resource Market


GOODS and SERVICES
Product Market
$$$$$$
FIRMS
HOUSEHOLDS
Factor Market
CAPITAL, LAND,
LABOR

	Links	Smiles
Round 1		
Round 2		
Round 3		
Round 4		

Links and Smiles Experiment

- Prepare:
- Each person needs 2 sheets of paper, scissors and tape
- Prepare the paper:
- Fold the two most distant ends together
- Fold the new most distant ends together
- Undo the last fold and fold each of the most distant ends in so that they touch the center line

Continued…

- Choose one side of the “swinging door” and fold it into the middle again.
- Unfold the papers and cut along the creases. Also, cut the wider strips in half width-wise. You should then have 16 strips and 16 rectangles.

Links and Smiles

- Every person is a manufacturer of links and smiles.
- A link is a strip of paper wrapped into a circle and taped in place. (like a Christmas chain)
- Smiles are made by cutting squares into circles and drawing 2 eyes and a smile on each
- Only one piece of paper can be cut at a time.

Rules

- Strips and squares can be altered for the alternative use. Strips can be taped together and cut in half to make squares, and therefore smiles. Squares can be taped together and cut lengthwise to make strips, and therefore links.
- Each round: 4 strips, 4 squares, scissors, tape.
- Cut only one layer of paper at a time.

Rules

- Each round is 70 seconds.
- Record your production in the chart for each round.

Production Goals

- Round 1: make 4 smiles and as many links as you can
- Round 2: make only links
- Round 3: make only smiles
- Round 4: make one smile and as many links as you can

Graph Your Results

- Smiles on horizontal axis
- Links on vertical axis

- Congratulations!! You've just created your first production possibilities curve!!

Notes: What is a PPC?

- Production Possibilities Curve
- **Graphical representation of the opportunity cost of using scarce resources to produce one good instead of another good.**

- Shows efficiency: using all resources to their fullest potential

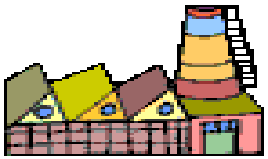
PPC Assumptions

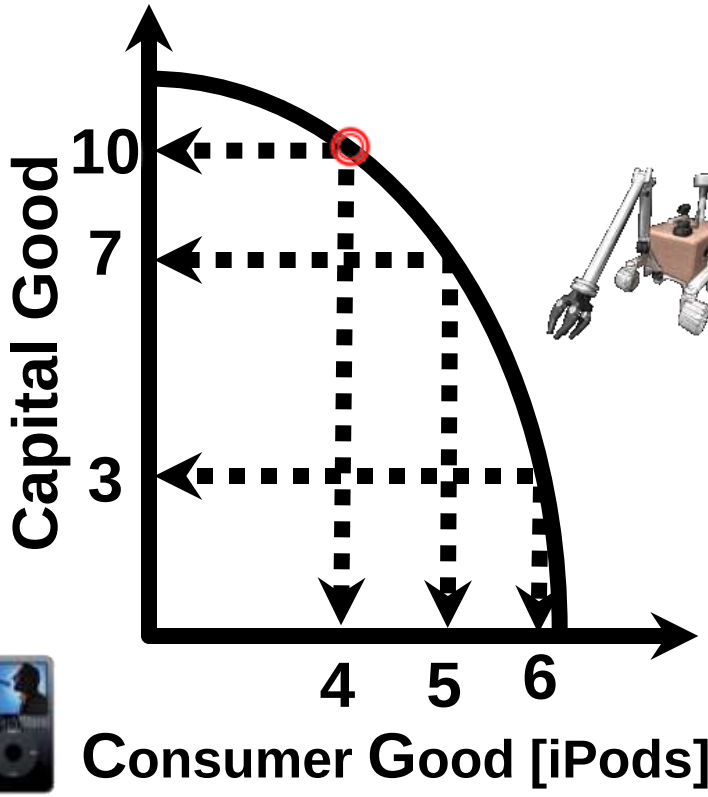
- Resources are fixed: (you can’t get more paper, scissors, labor, etc)
- All resources are being used fully
- Only 2 things can be produced
- Technology is fixed: no improvements in efficiency

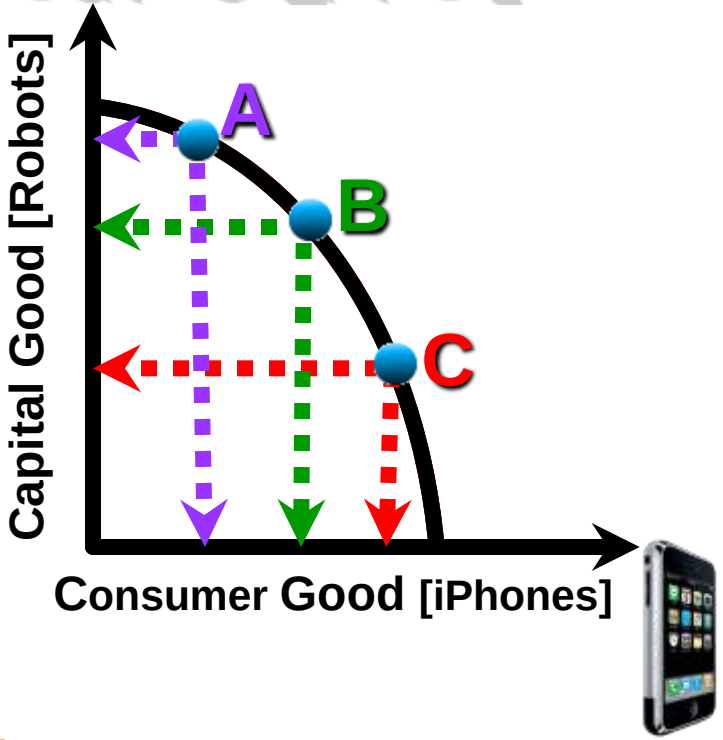
Notes:

- Points along the PPC are efficient
- Points underneath the PPC show underutilization: producing fewer goods than possible
- Points above PPC show impossible levels of production

Production Possibilities Curve [PPC]



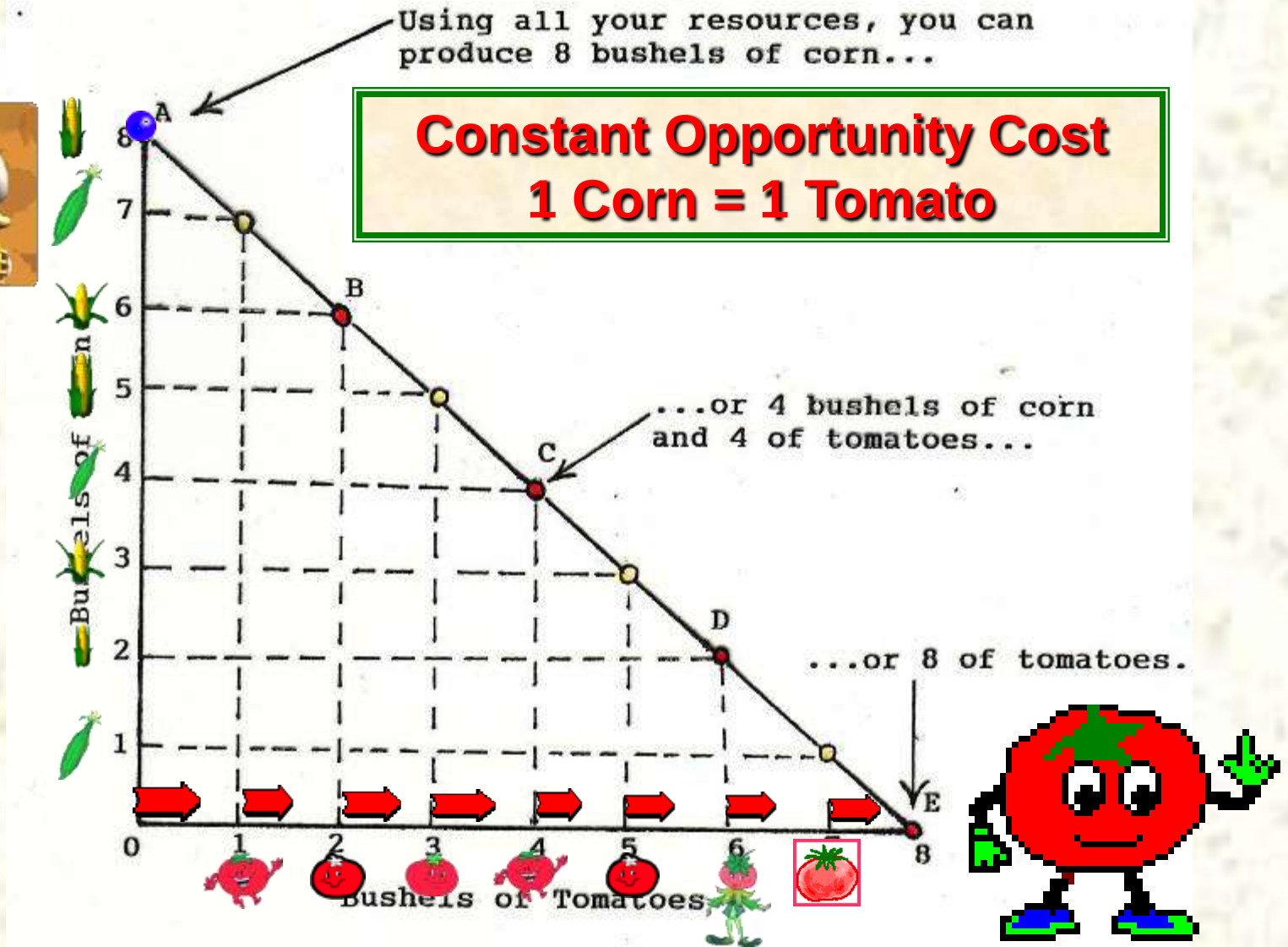




What are increasing vs. constant opp costs?

- Constant: OC is same throughout PPC (straight line)

The **STRAIGHT LINE** shows the two products Are **"equally substitutable"**, that is, they **are not specialized in particular uses**, so the **opportunity costs** will **remain constant**.



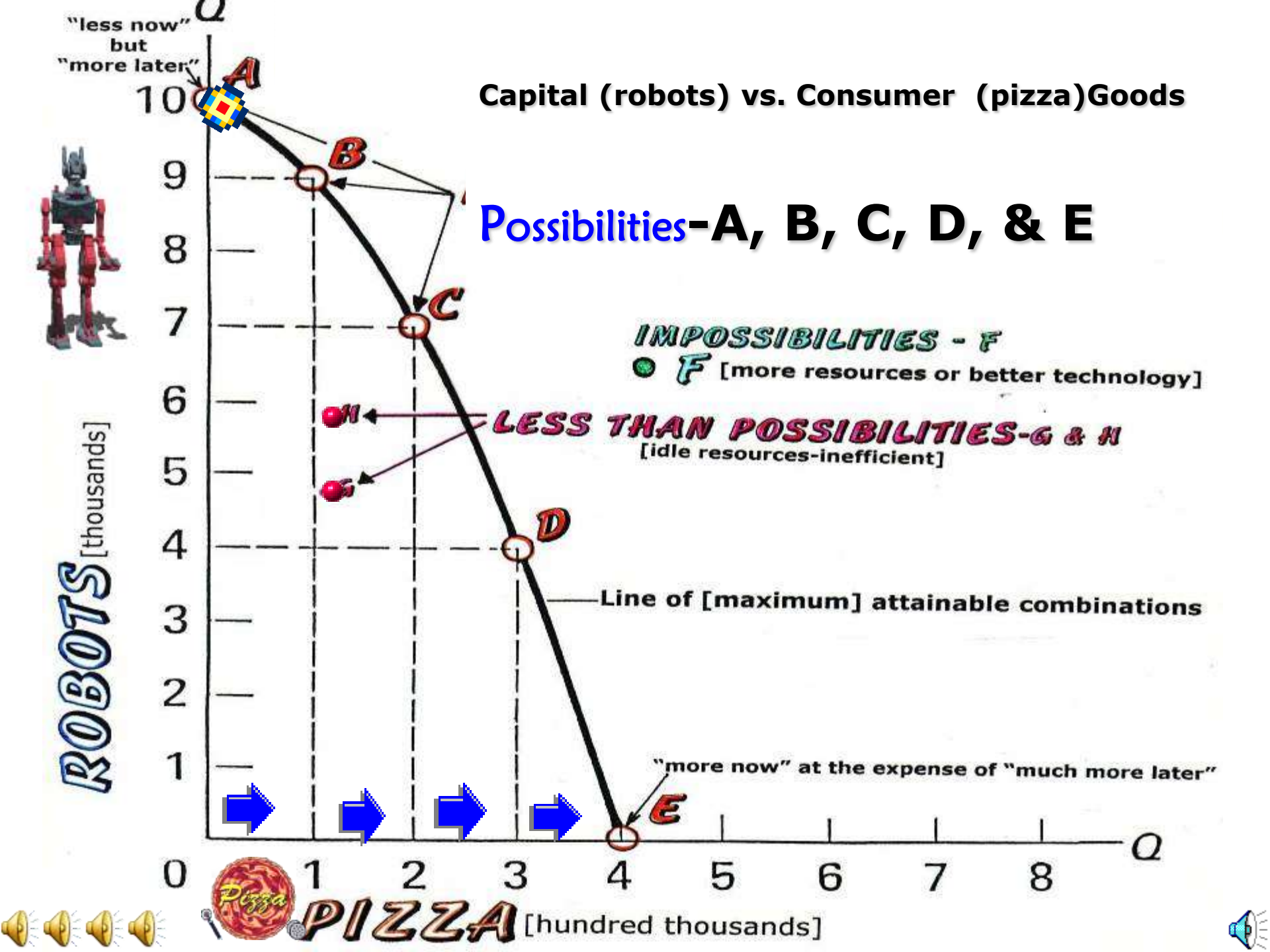
Constant Opportunity Cost
1 Corn = 1 Tomato

Increasing OPP costs: As I increase production of one good, I need to give up greater and greater amounts of the other.

WHY?

Resources aren’t similar, they need to be adapted.

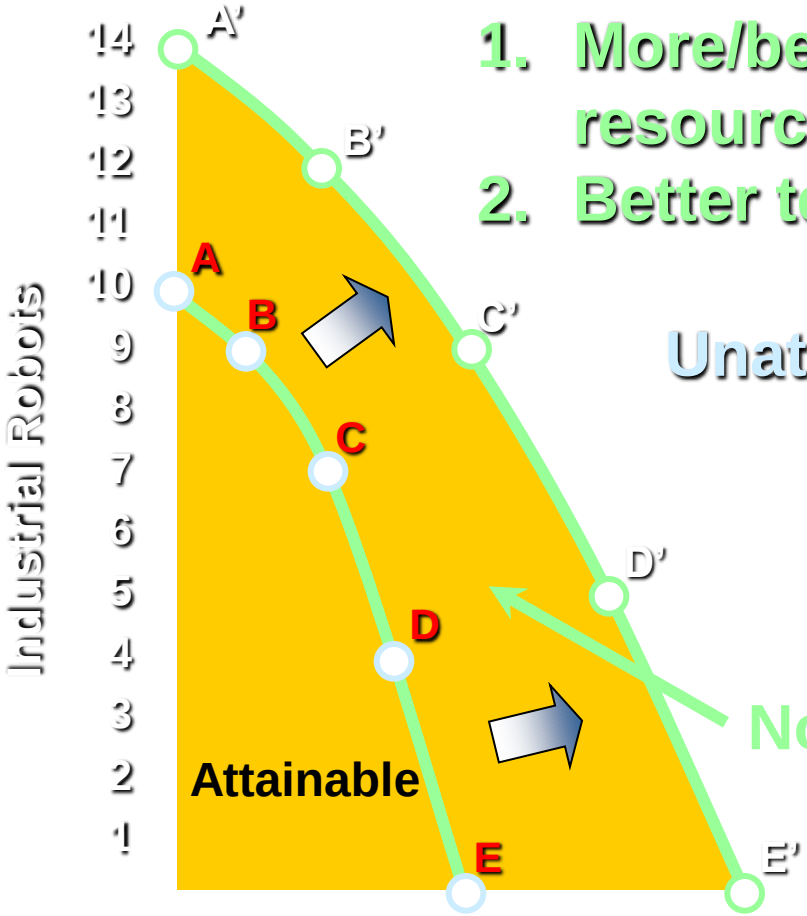
This causes the PPC to be “bowed out.”

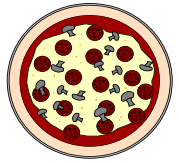

Capital (robots) vs. Consumer (pizza)Goods
Possibilities-A, B, C, D, & E
"less now" but "more later"
Q
A
B
C
D
E
10
9
8
7
6
5
4
3
2
1
0
IMPOSSIBILITIES - F
F [more resources or better technology]
LESS THAN POSSIBILITIES-G & H
[idle resources-inefficient]
H
G
Line of [maximum] attainable combinations
"more now" at the expense of "much more later"
ROBOTS [thousands]
1
2
3
4
5
6
7
8
Q
Pizza
PIZZA [hundred thousands]

Production Possibilities Curve

Economic Growth

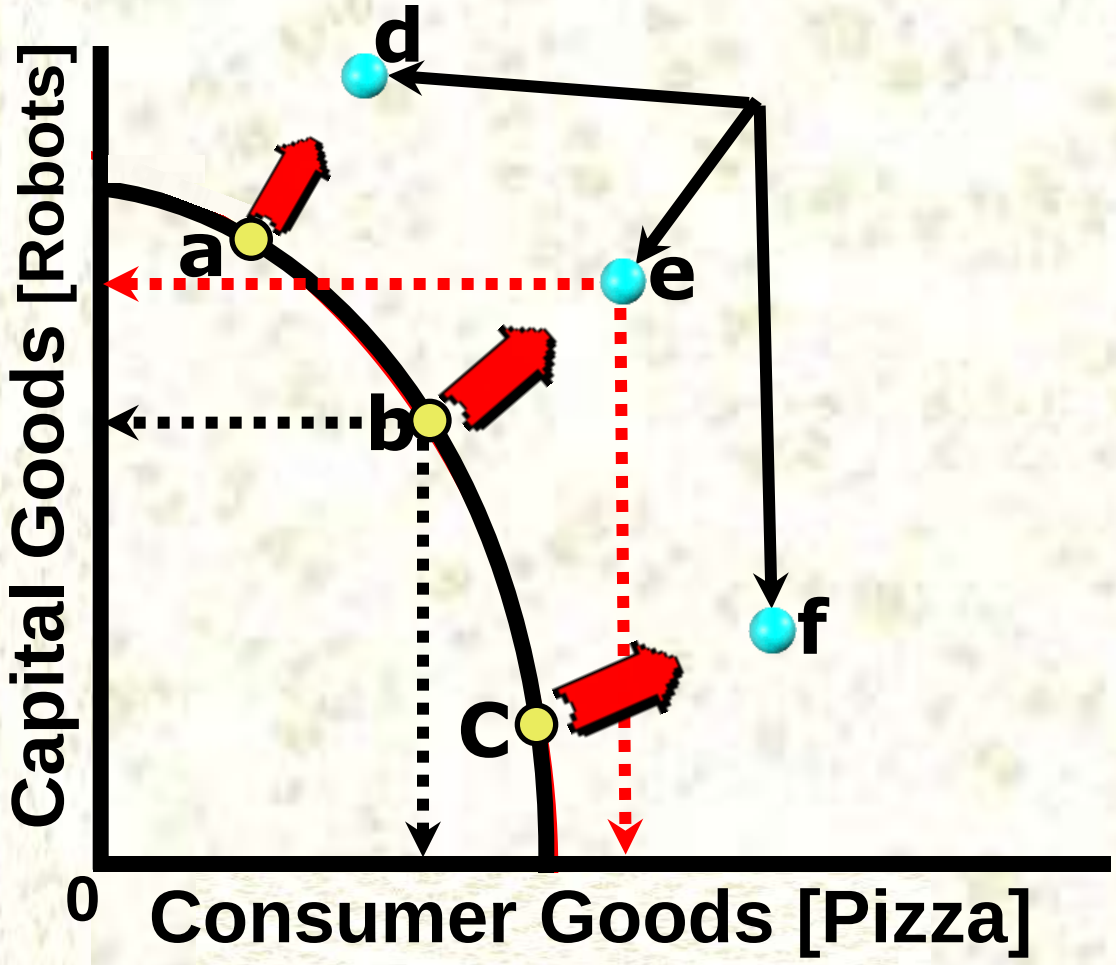
1. More/better resources
2. Better technology



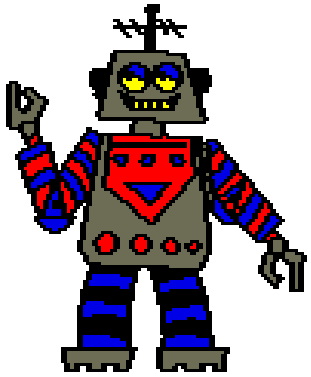


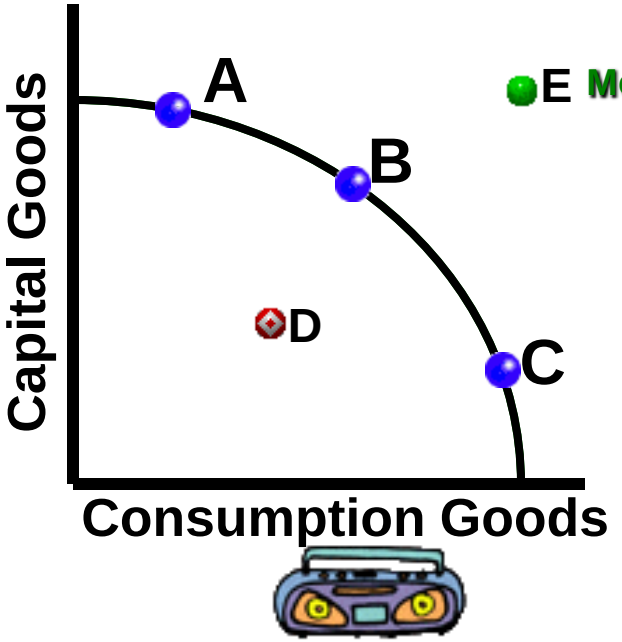
Demonstrating "Economic Growth" on a PPC Graph

Economic Growth - ability to produce a larger total output over time.



Production Possibilities





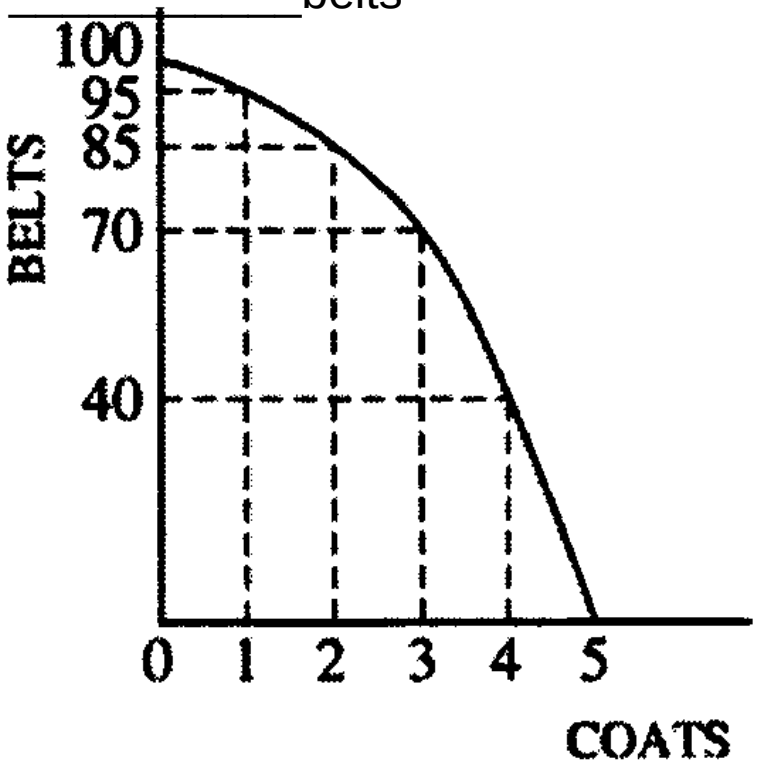
41. At what letter is there **unemployment** [**recession**]? **D**
42. What letters represent resources being used in their **most productive manner**? [full employment, full production, and best available technology] **A, B, or C**
43. What letter represents an **improvement in technology**, therefore a **new PPC** frontier line? **E**
44. The (straight line/curve) illustrates the **"line of increasing cost"**?
45. The (straight line/curve) illustrates the **"law of constant cost."**
46. At what letter would there be the **most economic growth in the future** if a country were producing there now? **A**

What is the **opportunity cost** when moving from **"C" to "A"**; **Consumption** **B** to **C**; **Capital** & do we have to give anything up when moving from **D** to **B**? **no**

What is the marginal opportunity cost of the first coat?_____belts

What is the marginal opportunity cost of the second coat?_____belts

What is the marginal opportunity cost of the third coat?_____belts

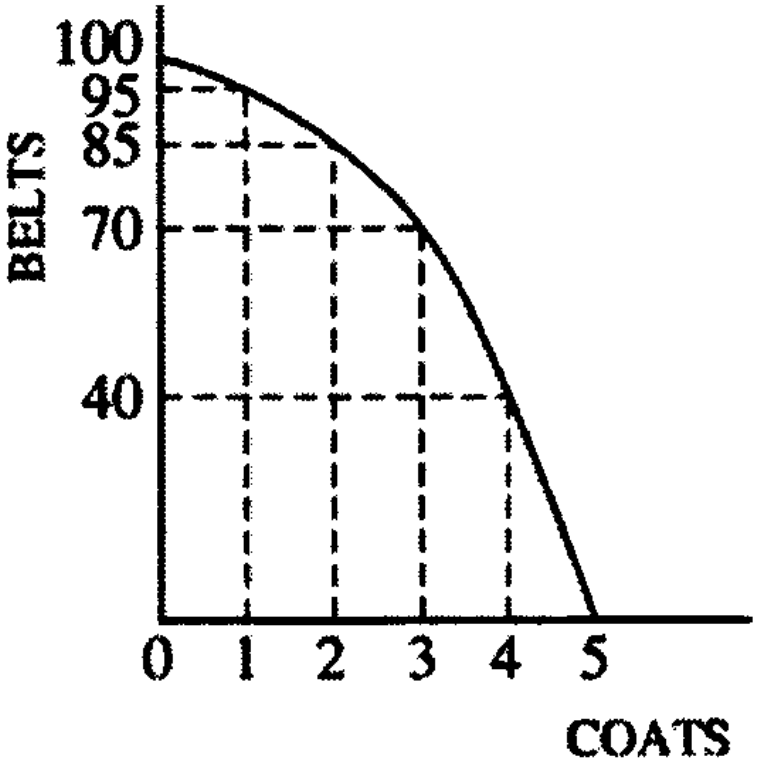


What is the marginal opportunity cost of the fourth coat?_____belts

What is the marginal opportunity cost of the fifth coat?_____belts

What is the marginal opportunity cost of the first belt?_____coat

To find marginal opportunity cost, use this equation:
#given up/#gained



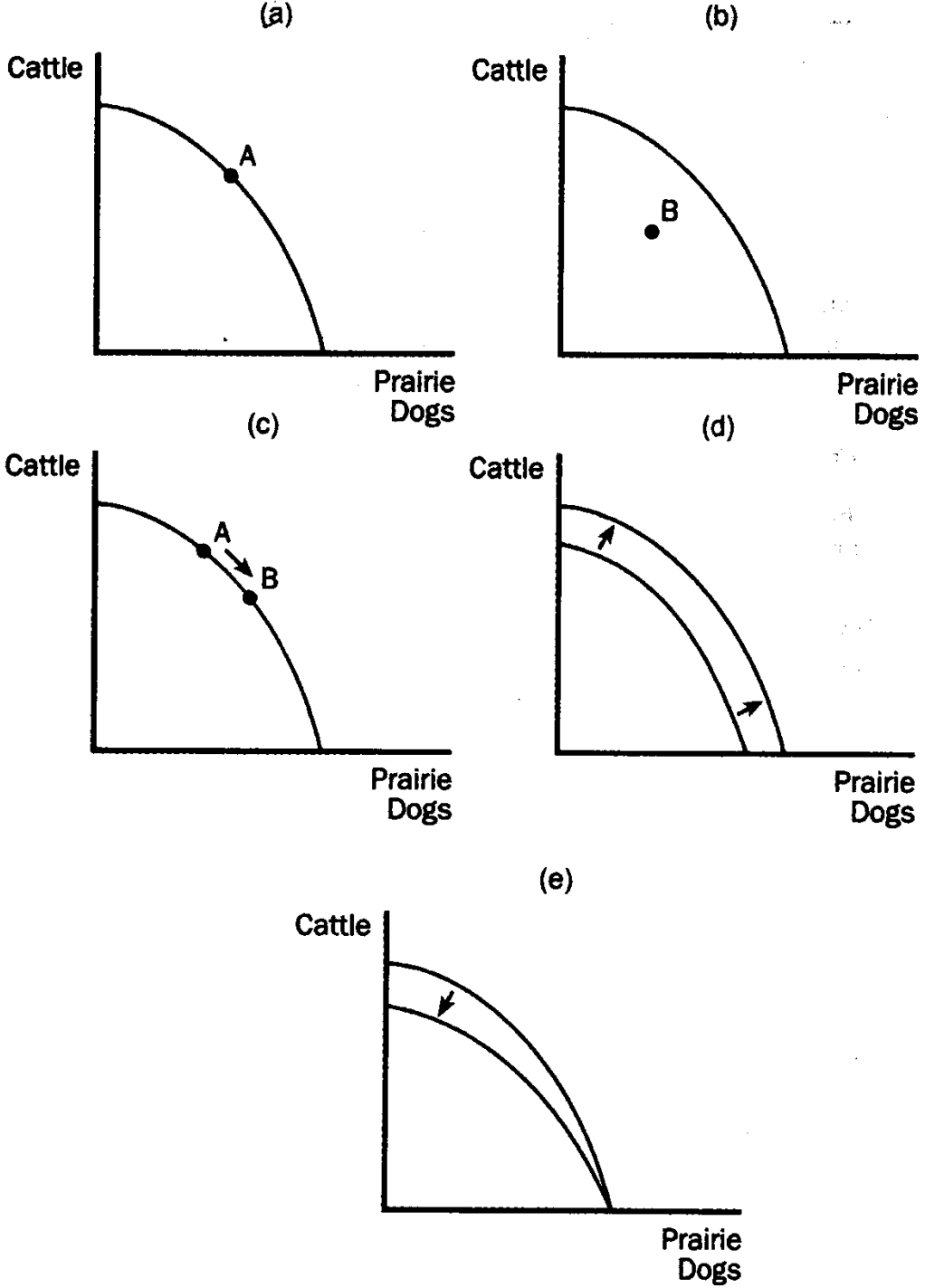
From 0 belts to 1 belt, the oc is 1/40 of a coat.

From 40 to 41 belts, the oc is 1/30 of a coat.

From 70 to 71 belts, the oc is 1/15 of a coat.

From 85 to 86 belts, the oc is 1/10 of a coat.

From 95 to 96 belts, the oc is 1/5 of a coat.


(a)
Cattle
A
Prairie Dogs
(b)
Cattle
B
Prairie Dogs
(c)
Cattle
A
B
Prairie Dogs
(d)
Cattle
Prairie Dogs
(e)
Cattle
Prairie Dogs

Comparative and Absolute Advantage

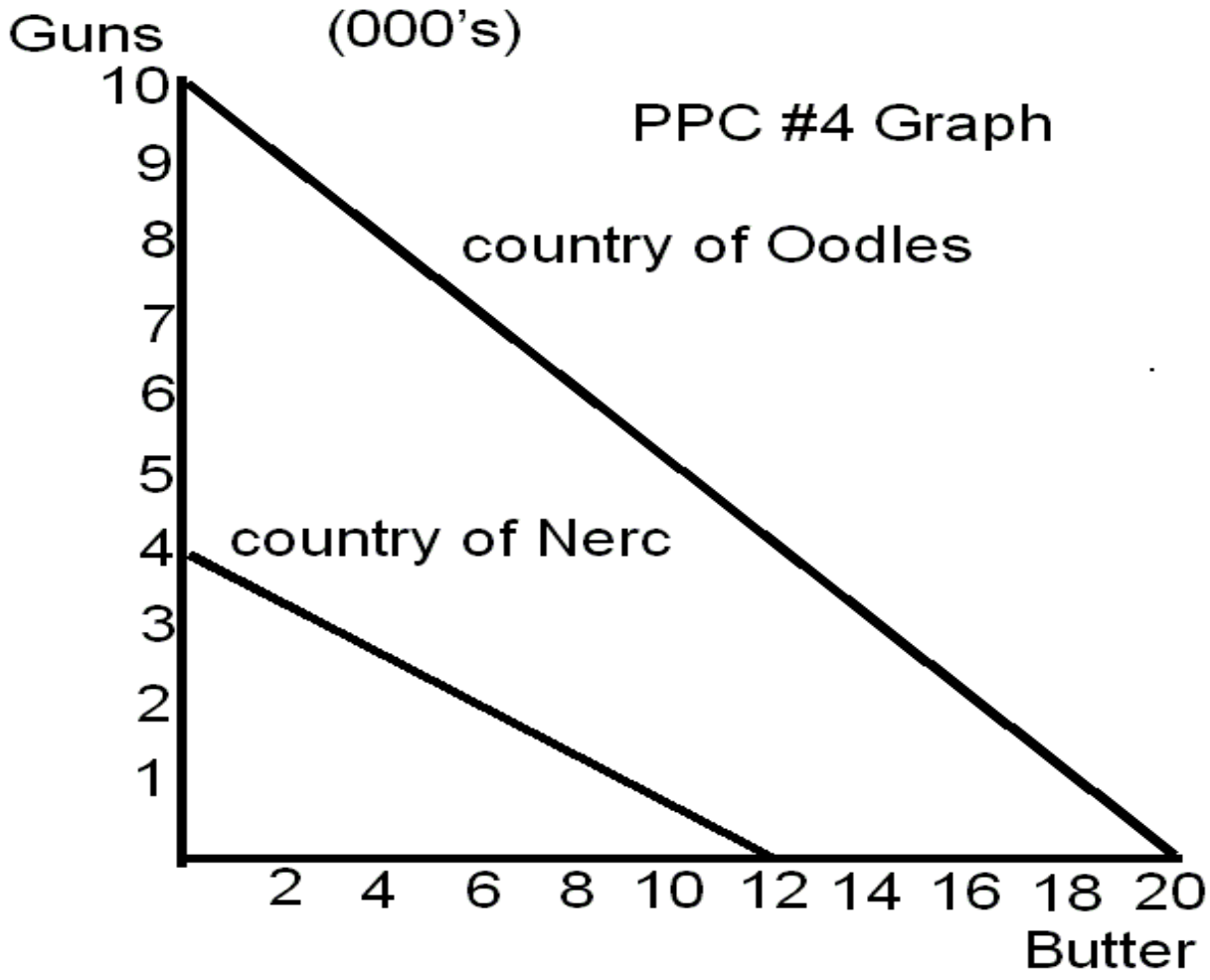
- Comparative advantage: having a lower opportunity cost of production than someone else

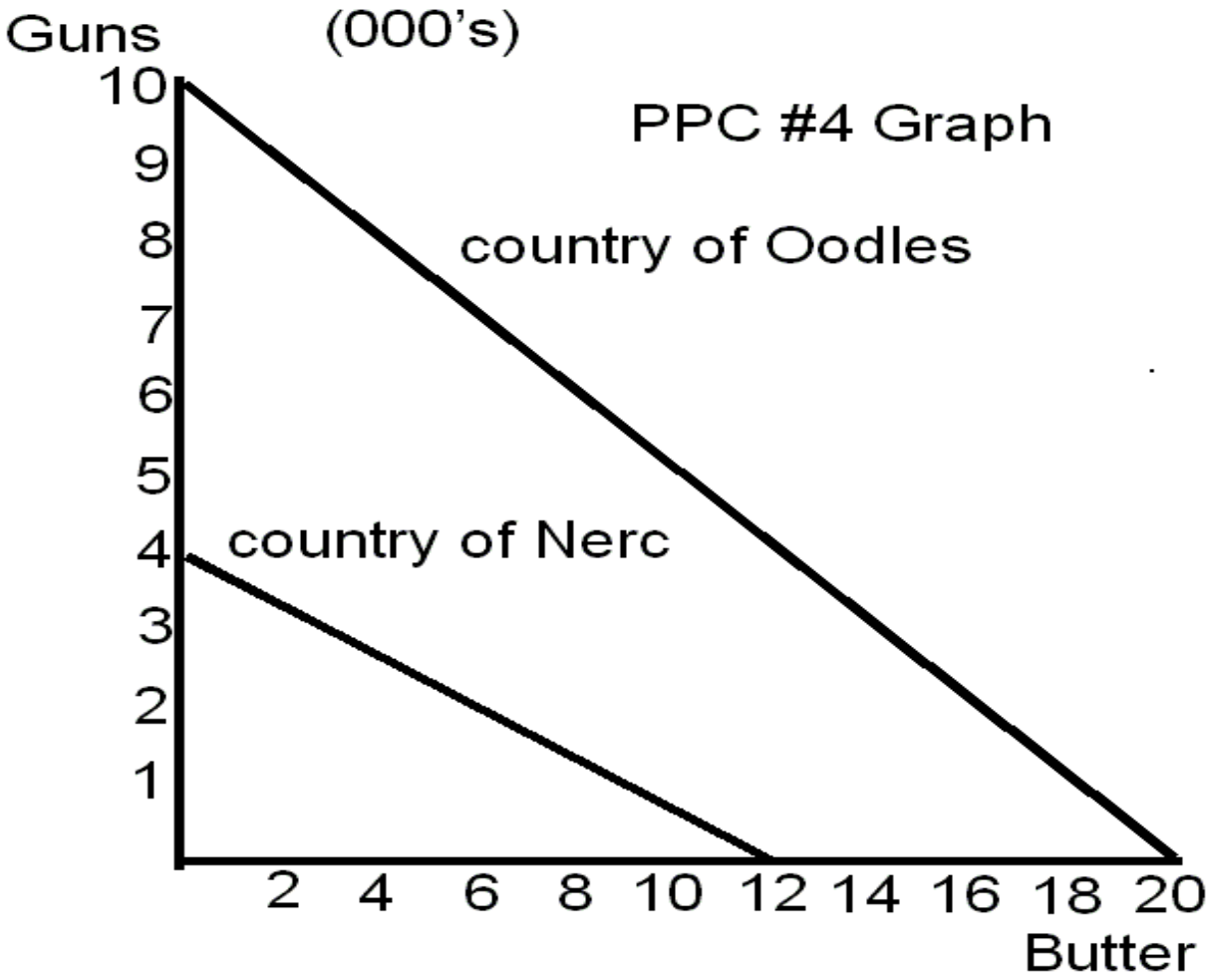
- Absolute advantage: being able to produce a large quantity of something or use fewer resources to produce a good

	Guns	Butter
Country	4	0
Of	3	4
Nerc	2	6
	1	8
	0	12

Country	Guns	Butter
Of	10	0
Oodles	9	2
	8	4
	7	6
	6	8
	5	10
	4	12
	3	14
	2	16
	1	18
	0	20

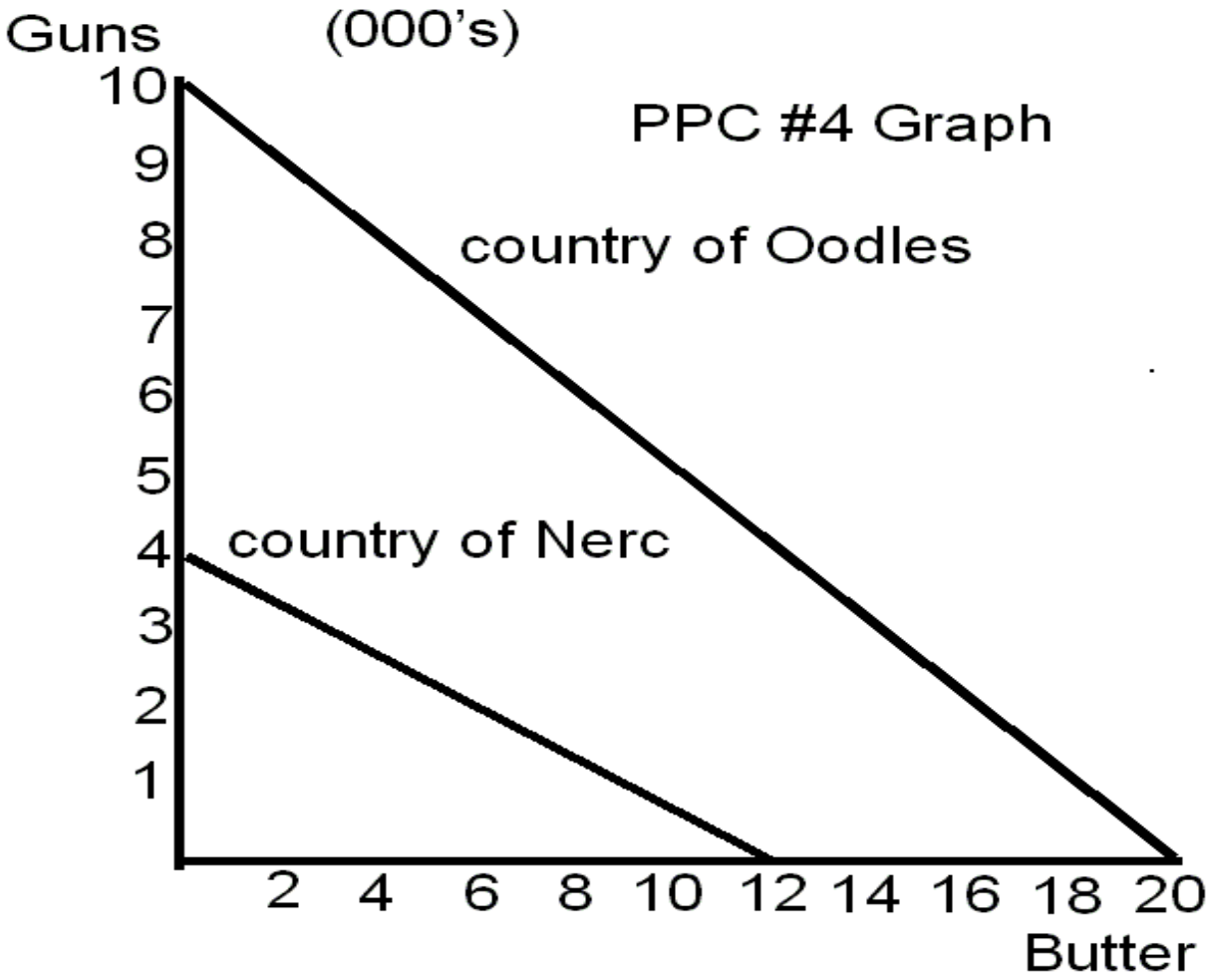
Comparative Advantage Questions: Output Method


Guns
(000's)
PPC #4 Graph
country of Oodles
country of Nerc
10
9
8
7
6
5
4
3
2
1
2 4 6 8 10 12 14 16 18 20
Butter



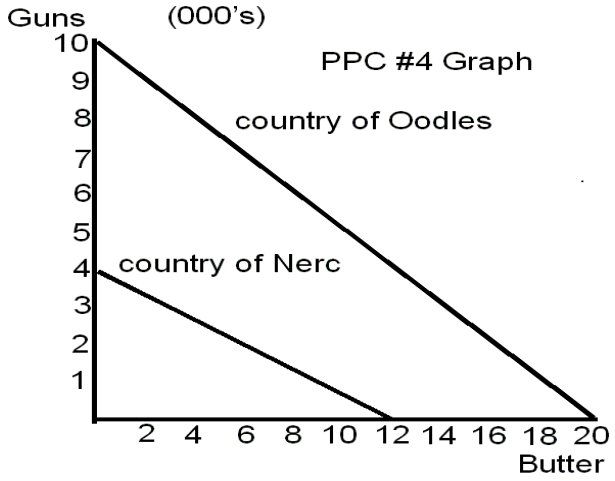
Which country has the absolute advantage in guns?

Which country has the absolute advantage in butter?



Does this means the countries wouldn't benefit by trading?

NO!! Comparative advantage is what counts.

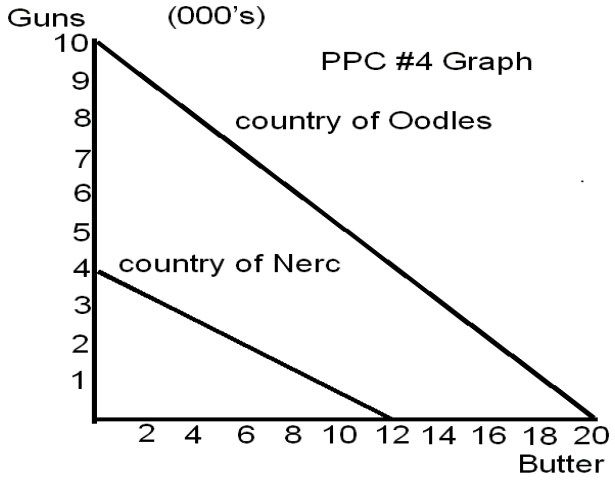


Consider the extremes: If Oodles produced ONLY guns or ONLY butter, how much could they produce?

For every gun produced, 2 butters must be given up.

1B=1/2 G

For every butter produced, ½ gun must be given up



Consider the extremes: If Nerc produced ONLY guns or ONLY butter, how much could they produce?

4G=12B
1G=3B

1B=1/3G

Nerc:

1G=3B

1B=1/3G

Oodles:

1G=2B

1B=1/2G

Nerc:

1G=3B

1B=1/3G

Oodles

1G=2B

1B=1/2G

What would be an acceptable term of trade?

France

Wine 1 bottle	Cheese 1 pound
2 hours	3 hours

Input, or Resource Comparative Advantage Question…

US

Wine 1 bottle	Cheese 1 pound
1 hour	1 hour

Consider how many resources it takes to make each item.

For the US in1 hour, 1 wine or 1 cheese can be produced.
So
1W=1C
And
1C=1W

France

Wine 1 bottle	Cheese 1 pound
2 hours	3 hours

US

Wine 1 bottle	Cheese 1 pound
1 hour	1 hour

Input, or Resource Comparative Advantage Question…

Consider how many resources it takes to make each item.

For France in 2 hours, 1 wine or 2/3 cheese can be produced, so

1W=2/3C
And
1 C=3/2 W

France

Wine 1 bottle	Cheese 1 pound
2 hours	3 hours

Input, or Resource Comparative Advantage Question…

US

Wine 1 bottle	Cheese 1 pound
1 hour	1 hour

SO, what should each country do?

France make wine, US make cheese, and trade.

Term of trade?

END OF UNIT 1!!!!!!!!!!!!